

Welcome to the era of  
**MOLECULAR ALLERGY** for animals!



**PAX**  
pet allergy xplorer



**First quantitative macroarray  
IgE test specifically designed  
for animals**

**Over 200 allergen extracts  
and molecular components**

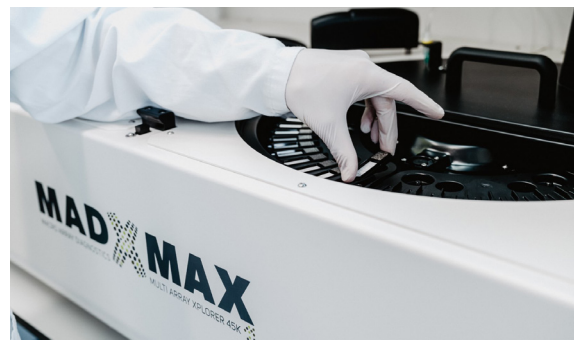
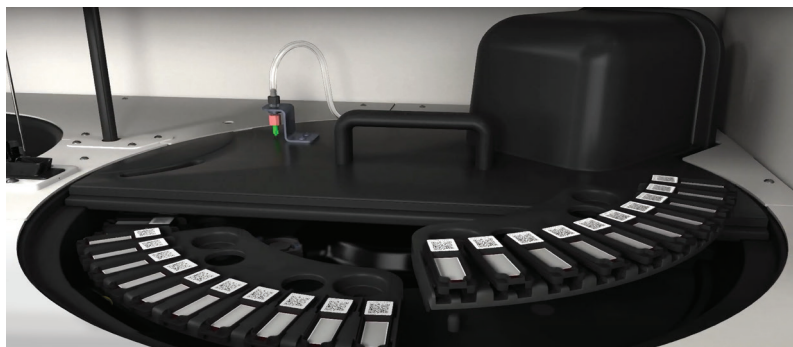
**Better identification of allergen  
cross-reactivities**

**Fully automated process, higher  
level of standardisation**

**With CCD blocking and  
2 blocking efficiency  
detectors**

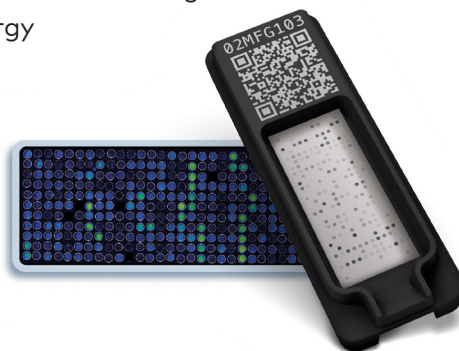


# Molecular Allergology: The future of IgE sensitisation detection



Molecular allergology is a state-of-the-art approach to the detection of sensitisations, whereby defined single allergen components are used for the determination of specific IgE in place of traditionally-used allergen extracts. The molecular components are recombinant proteins that provide a higher level of standardisation than allergen extracts and enable a more precise identification of IgE sensitisations. Molecular allergology tests are powerful tools that help pinpoint allergy triggers, thus facilitating risk assessment and therapy decisions.

Nextmune is bringing you the first molecular allergology platform for animals, the next-generation in allergen IgE serology:  
PAX - Pet Allergy Explorer

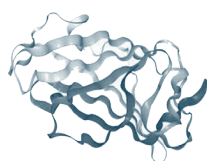


## What are the main advantages of PAX?

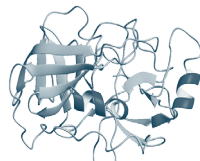
- First quantitative multiplex macroarray specifically designed for companion animals
- Over 200 allergen extracts and components included = lower testing cost per allergen
- Fully automated process = higher level of standardization (same result if tested multiple times)
- With CCD blocking and 2 blocking efficiency detectors
- Only 0.5 ml of serum needed per test
- Expected increase in serological test sensitivity due to a higher concentration of molecular allergens
- Identification of "primary" sensitizing allergens
- Identification of allergen cross-reactivities
- Selection of relevant allergens for specific immunotherapy



Allergen  
extract



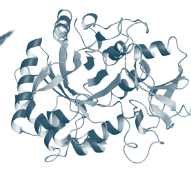
**Der f 2**  
NPC2 family



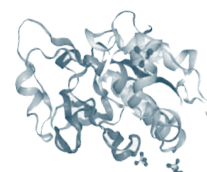
**Der f 3**  
trypsin



**Der f 10**  
tropomyosin



**Der f 15**  
chitinase



**Der f 1**  
cysteine protease

# The PAX results are clearly set out, easy to interpret and include the following information:

- Summary of detectable sensitizations
- Interpretation summary and treatment recommendation
- Detailed results per extract and components
- Detailed interpretation with Information about allergenicity and relevance, time of the year, possible cross-reactivities and treatment indication for each allergen

## PAX Complete result

The PAX Complete result interface is divided into four main sections:

- Environmental:** A summary of detectable sensitizations categorized by allergen groups such as Grass Pollen, Weed Pollen, Tree Pollen, Dander & Epithelia, Mites & Cockroaches, and Insects & Venoms. Each allergen is accompanied by a bar chart indicating the level of sensitization.
- Summary and immunotherapy recommendation:** Provides a concise overview of the patient's sensitization profile and offers specific recommendations for immunotherapy based on the detected allergens.
- Detailed allergen results:** A comprehensive table listing individual allergen extracts and their components, with corresponding sensitivity levels and clinical significance.
- Interpretation - Support:** Offers detailed clinical insights, including allergenicity and relevance information, seasonal prevalence, and specific treatment indications for each identified allergen.

## PAX Screening result

The PAX Screening result interface features a 'Screening Environmental' section. It displays a 'POSITIVE' result for the screening, indicating the presence of detectable sensitizations. Below the result, there is a 'PAX EXPAND' button, which likely leads to a more detailed analysis or further testing options. The interface is clean and user-friendly, with clear visual cues for the screening outcome.



- Guaranteed 100% reliable screening test
- Fast results
- Continuous support and advice with our vet allergy experts

# PAX Allergens: Components & Extracts

Common name	Scientific name	Extracts & Components	
Grass Pollens	Bermuda grass	Cyn d * rCyn d 1	
	Orchard grass	Dac g *	
	Meadow fescue	Fes p *	
	Perennial ryegrass	rLol p 1	
	Timothy	Phleum pratense	rPhl p 1
			rPhl p 2
			rPhl p 5.0101
			rPhl p 6
			rPhl p 7
Kentucky blue grass	Poa p *		
Ryegrass, cultivated	Secale cereale	Sec c_pollen *	

Common name	Scientific name	Extracts & Components	
Tree Pollens	Alder	Aln g *	
		rAln g 1	
		rAln g 4	
	Silver birch	Betula verrucosa	Bet v *
			rBet v 1
			rBet v 2
			rBet v 6
	Hazel	Corylus avellana	Cor a_pollen * rCor a 1.0103
	Cypress	Cupressus sempervirens	Cup s *
	Beech	Fagus sylvatica	rFag s 1
	Ash	Fraxinus excelsior	Fra e * rFra e 1
	Privet	Ligustrum vulgare	Lig v *
	Olive tree	Olea Europaea	Ole e *
			nOle e 1
rOle e 7			
London plane tree	Platanus acerifolia	rPla a 1	
		nPla a 2 rPla a 3	
Cottonwood	Populus nigra	Pop n *	
Elm	Ulmus campestris	Ulm c *	

Common name	Scientific name	Extracts & Components	
Weed Pollens	Ragweed	Amb a *	
		rAmb a 1	
		rAmb a 4	
	Mugwort	Artemisia vulgaris	Art v *
			rArt v 1.0101
			rArt v 3.0201
	Lamb's quarter	Chenopodium album	Che a * rChe a 1
	Wall pellitory	Parietaria judaica	Par j * rPar j 2
	Ribwort / Plantain	Plantago lanceolata	Pla l * rPla l 1
	Dock/Sorrel	Rumex crispus / acetosella	Rum c / * Rum a
	Russian thistle	Salsola kali	Sal k * rSal k 1
	Nettle	Urtica dioica	Urt d *

Common name	Scientific name	Extracts & Components	
Danders & Epithelia	Cattle	Bos domesticus	rBos d 2
	Dog	Canis familiaris	rCan f 1
			rCan f 2
			nCan f 3
			rCan f 4
			rCan f 6
			Can f_maleurine (including Can f 5) *
	Guinea pig	Cavia porcellus	rCav p 1
			rEqu c 1
	Horse	Equus caballus	nEqu c 3
			rEqu c 4
			rFel d 1
	Cat	Felis domesticu	nFel d 2
			rFel d 4
rFel d 7			
rOry c 1			
Mouse	Mus musculus	rMus m 1	
Rabbit	Oryctolagus cuniculus	rOry c 2	
		rOry c 3	

Common name	Scientific name	Extracts & Components	
Mites & Cockroaches	Acarus siro	Acarus siro	Aca s *
	German cockroach	Blattella germanica	rBla g 1
			rBla g 2
			rBla g 4
			rBla g 5
	Flea	Ctenocephalides felis	rBla g 9
			Cte f 1
	Dermatophagoides farinae	Dermatophagoides farinae	Der f *
			rDer f 1
			rDer f 2
			rDer f 15
			rDer f 18
			Der p *
			rDer p 1
rDer p 2			
Dermatophagoides pteronyssinus	Dermatophagoides pteronyssinus	rDer p 5	
		rDer p 7	
		rDer p 10	
		rDer p 11	
		rDer p 20	
		rDer p 21	
		rDer p 23	
		Glycyphagus domesticus	Glycyphagus domesticus
Lepidoglyphus destructor	Lepidoglyphus destructor	Lep d *	
	Lepidoglyphus destructor	rLep d 2	
Tyrophagus putrescentiae	Tyrophagus putrescentiae	Tyr p *	
	Tyrophagus putrescentiae	rTyr p 2	

Common name	Scientific name	Extracts & Components
Alternaria alternata	Alternaria alternata	Alt a *
		rAlt a 1
		rAlt a 6

Common name	Scientific name	Extracts & Components
Moulds & Yeasts	Aspergillus fumigatus	Asp f *
		rAsp f 1
		rAsp f 3
		rAsp f 4
		rAsp f 6
Cladosporium herbarum	Cladosporium herbarum	Cla h * rCla h 8
Malassezia pachydermatis	Malassezia pachydermatis	Mala p *
Malassezia sympodialis	Malassezia sympodialis	rMala s 1
		rMala s 9
		rMala s 5
		rMala s 6
		rMala s 11

Common name	Scientific name	Extracts & Components
Honey bee venom	Apis mellifera	Api m *
		nApi m 1
		Api m 2
		Api m 3
		Api m 5
Long-headed wasp venom	Dolichovespula spp.	rApi m 10
		Dol spp *
Paper wasp venom	Polistes dominulus	Pol d * rPol d 5
Fire ant venom	Solenopsis richteri & Solenopsis invicta	Sol spp *
		Ves v *
Common wasp venom	Vespula vulgaris	rVes v 1
		rVes v 5

Common name	Scientific name	Extracts & Components	
Foods	Oat	Avena sativa	Ave s *
	Buckwheat	Fagopyrum esculentum	Fag e *
			nFag e 2
	Sunflower seed	Helianthus annuus	Hel a *
	Barley	Hordeum vulgare	Hor v *
	Rice	Oryza sativa	Ory s
	Millet	Panicum miliaceum	Ory s_GLB1
			Pan m *
	Rye, cultivated	Secale cereale	Sec c_flour *
	Wheat	Triticum aestivum	Tri a *
			rTri a 14
			rTri a 19
	Corn, cereal	Zea mays	nTri a a_TI
			Zea m *
Apple	Malus domestica	rZea m 14	
		Zea m_GBSSI	
		rMal d 1	
Peanut	Arachis hypogaea	nMal d 2	
		rMal d 3	
		nAra h 1	
		rAra h 2	
		nAra h 3	
rAra h 5			
rAra h 6			
rAra h 8			
rAra h 9			
rAra h 15			

\* Extract

Common name	Scientific name	Extracts & Components
Soy	<i>Glycine max</i>	Gly m *
		rGly m 4
		rGly m 5
		nGly m 6
		nGly m 8
Lentil	<i>Lens culinaris</i>	Len c *
		Len c 1
		Len c 2
		Len c 3
Pea	<i>Pisum sativum</i>	Pis s *
		Pis s 1
		Pis s 2
		Pis s 3
Cow's milk	<i>Bos domesticus</i>	Bos d_milk *
		nBos d 4
		nBos d 5
		nBos d 8
Egg white	<i>Gallus domesticus</i>	Gal d_white *
		nGal d 1
		nGal d 2
		nGal d 3
Egg yolk	<i>Gallus domesticus</i>	Gal d_yolk *
		nGal d 5

Common name	Scientific name	Extracts & Components
Beef	<i>Bos domesticus</i>	Bos d_meat *
		nBos d 6
		Bos d 7
		Bos d_ACTA1
		Bos d_LDHA
Horse	<i>Equus caballus</i>	Equ c_meat *
Rabbit	<i>Oryctolagus spp.</i>	Ory_c_meat *
		Ory_c_CKM
		Ory_c_GAPDH
		Ory_c_PGM1
		Ory_c_PKM
Lamb	<i>Ovis aries</i>	Ovi a_meat *
		Ovi a_IgG
Pig	<i>Sus domesticus</i>	Sus d_meat *
Chicken	<i>Gallus domesticus</i>	rSus d 1
		Gal d_meat *
		Gal d 7
		Gal d 9
Turkey	<i>Meleagris gallopavo</i>	Gal d_PKM
		Mel g *
Mealworm	<i>Tenebrio molitor</i>	Ten m *
Herring, Atlantic	<i>Clupea harengus</i>	Clu h *
		rClu h 1

Common name	Scientific name	Extracts & Components
Cod, Atlantic	<i>Gadus morhua</i>	Gad m *
		nGad m 1
		Gad m 2+3
		Gad m 4
		Sal s *
Salmon, Atlantic	<i>Salmo salar</i>	Sal s 1
		Sal s 2
		Sal s 3
		Sal s 4
		Sal s 6
		Sal s 7
		Sal s 8
		Sal s 9
Mackerel, Atlantic	<i>Scomber scombrus</i>	Sco s *
		rSco s 1
Tuna	<i>Thunnus albacares</i>	Thu a *
Carrot	<i>Daucus carota</i>	Thu a 1
		Dau c *
Tomato	<i>Solanum lycopersicum</i>	rDau c 1
		Sola l *
Potato	<i>Solanum tuberosum</i>	rSola l 6
		Sol t *
		Sol t 2
		Sol t_GBSSI

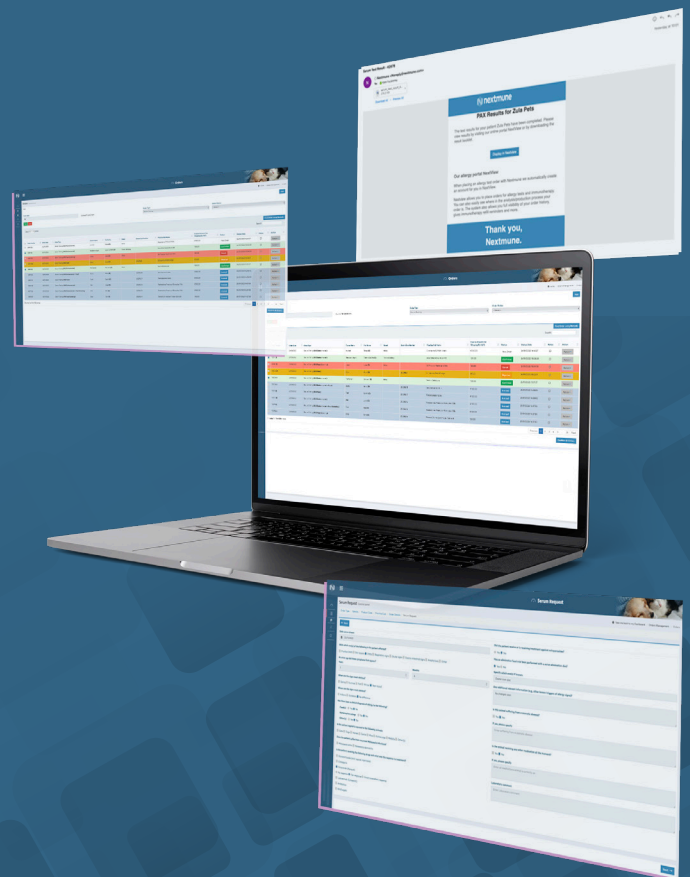
\* Extract



**NextView is a newly developed portal where you can manage all your allergy samples, PAX results, immunotherapy orders, reorders, and much more.**

**With Nextview you can:**

- Follow the status of your samples
- Access all your samples information, if they are in transit, being tested, and when results are expected.
- Easily find all results in one location
- Easily expand your screening results to complete panels
- Forward results directly to your customers for convenience
- Select and order a recommended treatment option with only one click
- Easily access your order history and re-order treatments with only one click
- Request a samples pick up (coming soon)
- Access your treatment reminder system (coming soon)
- Easily access your invoices (coming soon)



 **nextmune**

